What would an Ian McWhinney health care system look like?

Danielle Martin MD CCFP MPP **Kyla Pollack** MPH **Robert F. Woollard** MD CCFP FCFP

Medicine is an art of translation: physicians absorb a world of diagnostic frameworks and population-based guidelines, and translate them down to the level of a single person whose illness is but one piece of life and whose profile never quite matches the one in the textbook. Family medicine in particular, with its holistic and longitudinal approach so beautifully articulated by Ian McWhinney, functions in a world crowded with the stories of those individual patients—what McWhinney called "the territory," as opposed to "the map,"[1] where system thinkers reside.[2]

Does our proud residence in the territory, walking the lumpy road of life alongside our patients, inhibit our utility in analyzing the map? What can family doctors and the patient-centred model of primary care bring to the table when health care system issues, rather than individual patient problems, are at stake?

McWhinney never wrote explicitly about health care system design, but his insights into the meaning of family medicine reverberate beyond the discipline. He articulated a philosophy of health care that broke from the standard model of his time and spoke to an approach that departed from the classic medical model—from a mechanistic way of thinking about disease to an organismic way.[3] His ideas carry lessons not only for the way we think about patient care, but for the way we design the systems within which we provide that care.

As clinicians we have learned much about the meaning of our work from McWhinney. But as system advocates, we must stretch ourselves to consider how to design a system that responds not just to individuals, but to populations; not only to disease, but to the full scope of health needs; and not exclusively to the territory, but also to the map. In celebrating his life and work, we therefore challenged ourselves to answer a question that he did not answer himself: If Ian McWhinney had designed a health care system, what would that system look like?

A McWhinney health care system

A first-pass, easy answer to our question is that a McWhinney system would put primary care at the centre. We say this not just because of McWhinney's lifelong loyalty to, and respect for, the necessity of high-quality primary care to the health of individual patients. Health care systems centred on primary care are more cost-effective,[4,5] more equitable,[6] and deliver higher-quality care overall.[7,8] McWhinney's inherent understanding of and respect for generalism implied an intuition that turned out to be true not just for people, but for communities and populations: primary care is good both for *you* and for *us*.

Building a system centred on primary care sounds like a simple enough idea, but it turns out to be difficult to achieve. Even in Canada, a system with a high degree of primary care penetration (approximately 85% of Canadians have family physicians, a proportion that rises to 95% for adults with chronic illness[9]) and where primary care plays a gatekeeping role in the rest of the system, most resources still fall prey to the "tyranny of the acute."[10] Nearly one-third of all spending goes to hospitals compared with the mere 5% that is set aside for public health.[11] Important work is under way to re-orient our systems around strong patient-centred medical homes across Canada.[12,13] We approve, and we think Dr McWhinney would have approved as well.

But McWhinney's contribution to family medicine was not just to celebrate it. He shone a light on daily practice and brought meaning to the work of family physicians by articulating the philosophy that underpins good primary care. So, a McWhinney system would be one not just centred on primary care, but a philosophically rich and responsive network that could give life to big ideas in day-to-day, small ways. Such a system would have the following 3 attributes.

The unit of analysis is the relationship. One of McWhinney's enduring contributions to family medicine was the explicit acknowledgment of the centrality of the relationships in primary care. In his 1996 Pickles lecture, this is one of the things he pointed to as defining general practice.[3] This is not to say that the patient-physician relationship is the exclusive domain of family physician, but it is meaningful that family practice explicitly defines itself by that relationship. That "The patient-physician relationship is central to the role of the family physician" has been enshrined officially as 1 of the 4 principles of family medicine in Canada, which stress continued contact and the importance of the patient-physician relationship over time.[14] A system true to the McWhinney spirit, then, would use relationships as units of analysis.

We live in a time of increasing attention to metrics in health care, and while this development can

Cet article se trouve aussi en français à la **page 30.**

be helpful, too often metrics can be thoughtlessly assigned to quality improvement efforts. If it is true that you cannot improve what you do not measure, then we need to think long and hard about what we measure when we choose to define success in health care. McWhinney would want us to measure the things that matter, not merely the things that are easily quantifiable. Relationships—longitudinal, trusting, 2-way—have been posited as one possible explanation for the "Starfield effect" of primary care improving health outcomes while lowering system costs.[15,16] If a longitudinal relationship with a primary health care provider can profoundly improve health outcomes and lower health care system costs, we need to find ways beyond simply head counts and roster sizes to measure those relationships.

Thus, systems of resource deployment and professional rewards should be based on fostering and maintaining relationships. Institutions and payment systems based on disease entities and "full-time equivalents" of caregiver time can risk overinvestigation, misplaced expenses, and inadequate, sometimes harmful care. In contrast, those organized to support sustained therapeutic relationships, such as the ones described so elegantly by McWhinney, should thrive and serve. A large-scale case study from Alaska illustrates this beautifully. Burdened with an impersonal, inefficient care delivery model that was unresponsive to patient needs, the Southcentral Foundation, a non-profit, Alaska Native–owned health care system, underwent an overhaul from 1987 to 1999. In its place its leaders have implemented a system that is patient-centred, relational, and responsive to the community that it serves.[17] The resulting outcomes—measured using metrics that were chosen to reflect patient needs rather than easy-to-gather statistics—show across-the-board success that is now being studied as a model of care to be scaled up elsewhere.[18]

Complexity is celebrated. The traditional biomedical model was a triumph over the messiness and uncertainty of illness. With the right scientific approach, an expert history and physical examination, and knowledge of the evidence, physicians could save lives. But the elimination of a person's particular context, values, and goals from the equation yielded health care that was unsatisfying, unsatisfactory, and often hazardous.[19] The mechanistic metaphor driving the model—the "body as machine" framework that traces back to Descartes[20,21] and informs much of Western medical history—unveils a way of thinking about illness that is incomplete, and therefore inaccurate.

The human body is not a mechanistic system, but an organismic one, not a machine but a *complex adaptive system*. Complicated systems have many moving parts, and enormous skill and attention to detail are required if one is to intervene in them successfully, but the relationship between inputs and outputs is still linear and predictable. Complex systems respond in unexpected ways, with ripple effects across a system for any given input. Glouberman and Zimmerman applied a useful analogy to the health care system in their report for the Romanow Commission: engaging with a complicated system is like sending a rocket to the moon; engaging with a complex one is like raising a child.[22]

As McWhinney himself put it in his 1996 Pickles lecture, this shift to an organismic approach to sickness and health "requires a radical change" that is nonlinear and dynamic.[3] Just as such a shift calls for a radical orientation change for individual patient engagement, so too does it require that we adopt a new, even radical, paradigm if it is to be incorporated into the health care system overall.

The patient-centred model of clinical care, first articulated by McWhinney and his colleagues in their 1995 book *Patient-Centered Medicine: Transforming the Clinical Method*,[23] captures elements of complex systems and describes how to effectively intervene in them as a physician. The model is an expression of complexity: it requires that we understand not only biological disease but also the individual's experience of illness, the broader social context, and the determinants of health, and then work tirelessly to find common ground and enhance the relationship.

Health care systems are not designed around complexity. Our system excels in complicated moments: the organ transplant, the trauma patient, the 28-week preterm baby. When many moving parts require momentary coordination to save a life, our biomedically oriented, specialty-driven system comes through. But we all know that for our patients with complex chronic illness, multiple comorbidities, mental illness, and socioeconomic instability, our systems are woefully inadequate. A system designed around complexity would do at the level of the map what the patient-centred clinical method does in the territory. It would integrate health and social services; include community values and needs in the design of services; and seek to enhance outcomes according to common definitions of success shared by citizens, not just priorities identified by "experts." And all of this would be achieved by using the relationships between parts and people as the fundamental focus of the system. As the historian Arnold Toynbee points out:

> Society is the total network of relations between human beings. The components of society are thus not human beings but the relations between them. In a social structure individuals are merely the foci in the network of relationships .... A visible and palpable collection of people is not a society; it is a crowd.[24]

A complex system like a society adapts to challenges through this network of relationships; a "crowd" of physicians and patients in a modern hospital or walk-in clinic neither senses nor adapts to the changes in demographic characteristics or values that occur over time.

The system resists corruption. Like all of us, Ian McWhinney would accept that any system is inherently imperfect. Thus, a well-designed system, like the human body, would not be static: its design would include feedback loops to ensure continuous responses and adaptations to meet changing needs over time. Like the hypothalamic-pituitary axis, a successful health care system should never rest but rather constantly adjust itself to the realities of the moment. But systems can be vulnerable to different kinds of feedback; given his patient-centred orientation, we feel sure that Dr McWhinney would want to see them respond to human needs above other influences.

An effective feedback loop is one that responds to community input and that of front-line providers, while resisting the "diseases" that can so easily provide nefarious feedback, such as the following:

- the drive to profit;
- the impulse to accommodate providers over patients;
- the temptation to make use of technology just because it is there; and
- the pressure to build systems that respond to impressions and provider interests rather than evidence.

The McWhinney model and health care today

Ian McWhinney delivered the Pickles lecture in 1996, almost 20 years ago. The health care system he functioned in was different from the one in which we work today. In some ways, we have moved closer to the McWhinney model through a shift to team-based primary care and an increasing focus on longitudinal care with the elements of a patient-centred medical home.[25] In other ways, we are still too vulnerable to a complicated, rather than a complex, view of the health care system, as evidenced by a proliferation of disease-based "strategies" to improve health care for one body part or another rather than a holistic approach to people and communities. The struggle to build feedback loops where they are needed and resist corruptive feedback is ongoing. McWhinney's great insights can continue to guide us, but he left us plenty of work to do. As a community of family physicians determined to honour him, we can use his insights and vision to build a health care system that reflects its humanity, equality, and justice.

Dr Martin is a family physician and Vice President for Medical Affairs and Health System Solutions at Women's College Hospital in Toronto, Ont, and Assistant Professor in the Department of Family and Community Medicine and the Institute of Health Policy, Management and Evaluation at the University of Toronto. **Ms Pollack** is Health System Solutions Coordinator at Women's College Hospital. **Dr Woollard** is Professor in the Department of Family Practice at the University of British Columbia in Vancouver.

Competing interests
Dr Woollard is a member of the Editorial Advisory Board for *Canadian Family Physician*.

Correspondence
Dr Danielle Martin; e-mail **Danielle.Martin@wchospital.ca**

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